

LEVEL  
**2**

Shiny nose

Soft fur

# READING JUICE for KIDS

AUDIO CD included

Non-fiction Reading in Science and Social Studies

# READING JUICE for KIDS

Non-fiction Reading in Science and Social Studies

2

Created by THE LAB Education Research Center

# Contents



4 About Reading Juice for Kids Series



6 Unit 1 Why Onions Make You Cry

Science



10 Unit 2 How Long is the Great Wall of China?

Social Studies



14 Unit 3 An Ant Farm

Science



18 Unit 4 Animal Shelters

Social Studies

22 Vocabulary Check 1



24 Unit 5 The Milky Way

Science



28 Unit 6 Leaves and Needles

Science



32 Unit 7 A Sound Player

Science



36 Unit 8 A Winter Carnival

Social Studies

40 Vocabulary Check 2





- 42 Unit 9 Smelly Spray Science



- 46 Unit 10 Dinosaurs in the Rock Science



- 50 Unit 11 Washoe's Words Social Studies



- 54 Unit 12 History of Ice Skates Social Studies

- 58 Vocabulary Check 3



- 60 Unit 13 The New Soil Science



- 64 Unit 14 Cars for Clean Air Social Studies



- 68 Unit 15 Out of the Dark Social Studies



- 72 Unit 16 White as Snow Science

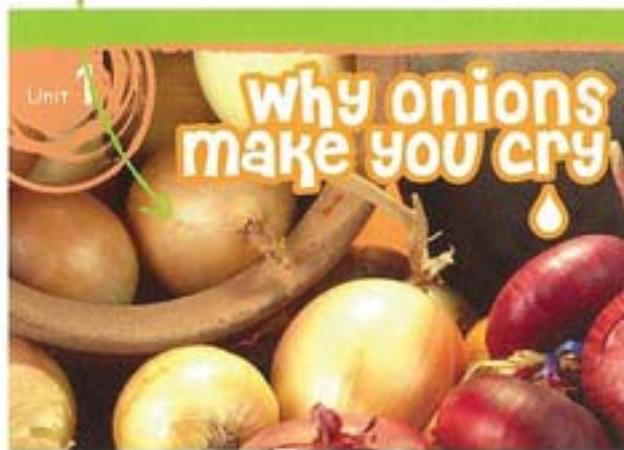
- 76 Vocabulary Check 4

- 78 Glossary



# About Reading Juice for Kids Series

**Photo** allows to start the lesson smoothly and engage students into reading.



## Get Ready

### 1. What makes you cry?

- |         |                |                 |
|---------|----------------|-----------------|
| test    | sad movie      | beautiful music |
| dentist | roller coaster | ghost house     |

### 2. Listen and repeat.

- |       |      |              |
|-------|------|--------------|
| sting | gas  | goggles      |
| break | cell | refrigerator |

**Passage** provides methodically written non-fictional articles to broaden students' knowledge in school subjects of science and social studies.

Unit 1: Why onions make you cry

Your mother is crying in the kitchen. Is she sad? No. She is cutting an onion! The onion is making her cry. Why?

An onion is made up of many cells. When you cut an onion, the cells break open, then, a gas comes out of the cells. You cannot see the gas, but it stings your eyes. Your eyes do not like the gas. They are trying to wash it away with tears. So you cry!

What can you do? Put the onion in the refrigerator, or cook the onion first. Now, cut it. See? You do not cry. If you are in a hurry, here is another idea. Wear goggles!



## Get Ready

**Background Knowledge** activates students into talking to predict the main idea of the passage with their prior knowledge about the topic.

**Vocabulary** introduces the key words of the passage with listening practice. The English definition of each word appears in the Glossary on page 78.

## Build Vocabulary

confirms the meaning of the key words in various contexts with questions in test format.

### Check Comprehension

#### Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- why you cry while eating onions
- why you cry while cutting onions

2. A gas comes out of \_\_\_\_\_.



onion cells



onion skins

3. Put onions in the \_\_\_\_\_ before cutting.



refrigerator



dark box

#### Check the correct answers.

4. The color of the onion gas is yellow.

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

5. Your tears wash away the onion gas.

6

### Build Vocabulary

#### Complete the sentences.

gas      sting!      goggles

1. Put on your \_\_\_\_\_ when you ski.

2. There is a strong smell of \_\_\_\_\_ in the kitchen.

3. If soap gets into the eyes, it \_\_\_\_\_.

### Organize Information

#### Complete the graphic organizer.



Check Comprehension prepares students to get familiar with test format questions as well as confirms students' understanding of the passage.

Organize Information helps students to verify and summarize the knowledge they obtained through reading.

# why onions make you cry



## Get Ready

### 1. What makes you cry?

test

sad movie

beautiful music

dentist

roller coaster

ghost house

### 2. Listen and repeat.



sting

gas

goggles

break

cell

refrigerator

Your mother is crying in the kitchen. Is she sad? No. She is cutting an onion! The onion is making her cry. Why?

An onion is made up of many cells. When you cut an onion, the cells break open. Then, a gas comes out of the cells. You cannot see the gas, but it stings your eyes. Your eyes do not like the gas. They are trying to wash it away with tears. So you cry!

What can you do? Put the onion in the refrigerator, or cook the onion first. Now, cut it. See? You do not cry. If you are in a hurry, here is another idea. Wear goggles!



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- a why you cry while eating onions
- b why you cry while cutting onions

2. A gas comes out of \_\_\_\_\_.

a



onion cells

b



onion skins

3. Put onions in the \_\_\_\_\_ before cutting.

a



refrigerator

b



dark box

## Check the correct answers.

True False

4. The color of the onion gas is yellow.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5. Your tears wash away the onion gas.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

# Build Vocabulary



## Complete the sentences.

gas

stings

goggles

1. Put on your \_\_\_\_\_ when you ski.
2. There is a strong smell of \_\_\_\_\_ in the kitchen.
3. If soap gets into the eyes, it \_\_\_\_\_.

# Organize Information



## Complete the graphic organizer.

### Cause

- Cut an onion.
- Onion cells \_\_\_\_\_ open.
- Onion cells make a gas.
- The gas \_\_\_\_\_ your eyes.

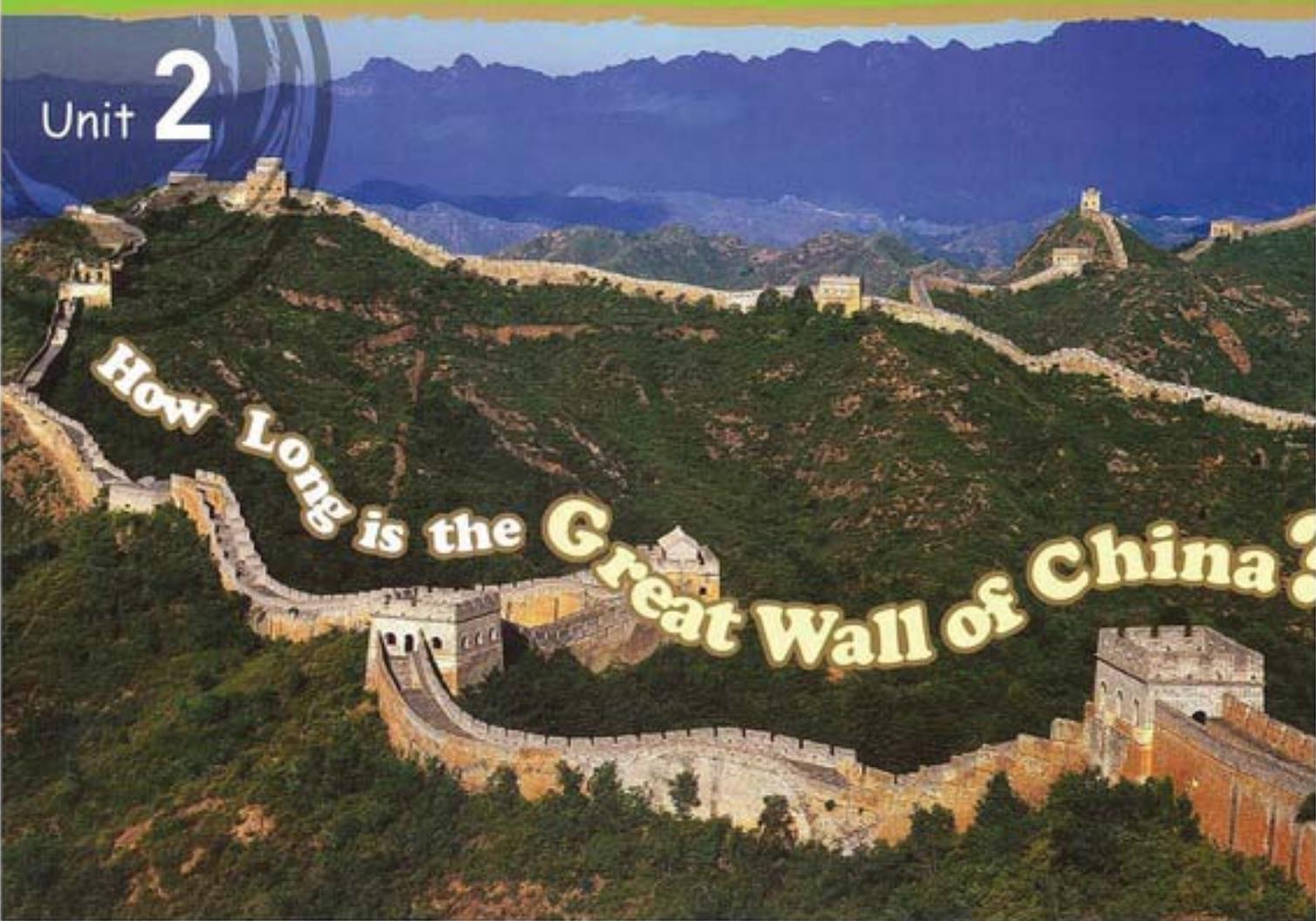
### Effect



You \_\_\_\_\_.

 **break**
 **stings**
 **cry**
 **a gas**


# Unit 2



How Long is the Great Wall of China?

## Get Ready

1. What do you know about the Great Wall of China? True False

It is the oldest wall in the world.

It is built of stones.

It took ten years to build it.

Many people visit there.

2. Listen and repeat. 

protect

enemy

emperor

treasure

the longest wall in the world

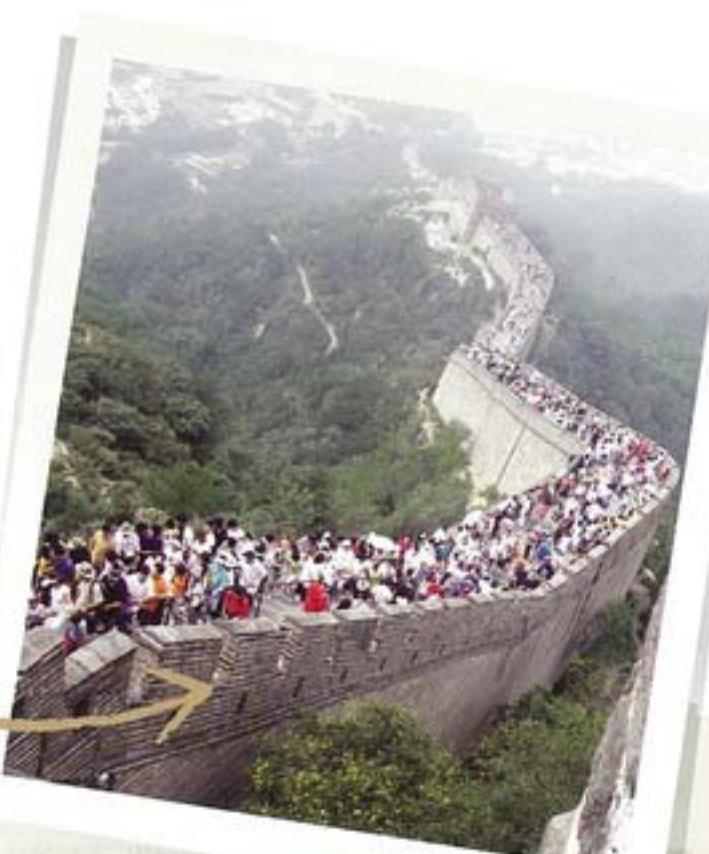
## How Long is the Great Wall of China?

Look around your house. The walls protect you from many things. They protect you from wind and rain. They protect you from your enemies. They keep you safe.

Many years ago, an emperor in China wanted to protect his country. So the emperor decided to build a wall—a very big and long wall. It took hundreds of years to build the wall. The wall is called “The Great Wall of China.” It became the longest wall in the world. It is about 2,400 kilometers long. It takes one month to walk the wall!

Today, the Great Wall of China is not used to protect China. Now, it is the national treasure of China.

*the longest  
wall in the  
world*



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- a the treasure of the Great Wall of China
- b the history of the Great Wall of China

2. \_\_\_\_\_ protect you from wind, rain, and enemies.

a



Walls

b



Mountains

3. It takes \_\_\_\_\_ to walk the Great Wall of China.

a



one month

b



one year

## Check the correct answers.

True False

4. The Great Wall of China is the longest wall in the world.

5. The Great Wall of China still protects China.

## Build Vocabulary



### Complete the sentences.

enemies

emperors

protects

- The soldiers won the battle. Their \_\_\_\_\_ ran away.
- The mother bird \_\_\_\_\_ the baby birds from snakes.
- Many \_\_\_\_\_ ruled the Roman empire.

## Organize Information



### Complete the graphic organizer.

The Great Wall of China	
Who	An _____ in China decided to build it.
Why	It was built to _____ China.
How many years	It took <u>hundreds of years</u> to build it.
How long	It is about _____ long.

2,400 kilometers

emperor

hundreds of years

protect

# An Ant Farm



## Get Ready

1. What are the words for ants?

small	big	weak	underground
tunnels	strong	antenna	live together
queen	workers	eggs	live alone

2. Listen and repeat.

place	fill	dig up
tunnel	jar	earth

Ants are good at making tunnels. You can watch ants' tunnels in your room.

First, get a large, clear jar.

Next, fill the jar with earth.

Then, dig up an ant nest outside. Get the ants. Put them in the jar.

Next, place a piece of damp paper on the earth. Add some scraps of cheese or fruit. Ants need water and food.

Last, cover the jar with a piece of cloth. Hold the cloth with a rubber band. The ants cannot get out.

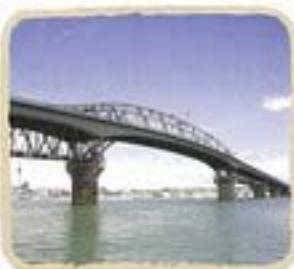
Now, it's time to watch!



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.  
**a** how to make an ant farm    **b** where to find an ant farm
  
2. The ants in the jar can get \_\_\_\_\_ from damp paper.  
**a**   
paper                      **b**   
water
  
3. Ants are good at making \_\_\_\_\_.  
**a**   
bridges                      **b**   
tunnels

## Check the correct answers.

True False

4. Ants eat cheese and fruit.
5. You can dig up the earth to find ants.

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

## Build Vocabulary

### Complete the sentences.

placed

middle

dig up

1. Tim is sitting in the \_\_\_\_\_ of the table.
2. My dog likes to \_\_\_\_\_ a hole in a secret place.
3. Mom moved my computer and \_\_\_\_\_ it in her room.

## Organize Information

### Complete the graphic organizer.

#### How to Make an Ant Farm

First, get a large, clear \_\_\_\_\_.



Second, \_\_\_\_\_ the jar with earth.



Third, put in the ants.



Last, cover the jar with \_\_\_\_\_.

 **fill**

 **jar**

 **cloth**

 **ants**





# Animal shelters

## Get Ready

1. What do you do to take care of your dog?

give food      play together      brush its teeth  
take a walk      give a bath      comb its hair

2. Listen and repeat.



bring      shelter      visit  
homeless      stray      animal

Many cats and dogs live on the streets. They do not have homes. Nobody feeds them. Some are sick. Some are old. They are called stray animals.

People bring stray animals to animal shelters. Animal shelters are homes for homeless animals. Stray animals get food and water there. They also get baths. They are safe in the shelter.

But animal shelters are small. They cannot take every stray animal. So the animals need to find a new home.

Let's help these animals. Visit an animal shelter near you. You may find a new friend there.



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- (a) homes for stray animals      (b) new animal friends

2. Stray animals live \_\_\_\_\_.

(a)



in a cage

(b)



on the street

3. Stray animals get \_\_\_\_\_ in the shelter.

(a)



training

(b)



baths

## Check the correct answers.

True   False

4. Animal shelters can take every stray animal.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5. People can take dogs from animal shelters.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

# Build Vocabulary



## Complete the sentences.

bring

shelter

visit

- Can I go to the hospital to \_\_\_\_\_ Grandma?
- Homeless people need a \_\_\_\_\_ to be warm in winter.
- I want to take a photo. Please, \_\_\_\_\_ your camera.

# Organize Information



**Animal Shelters**  
give

- homes, \_\_\_\_\_, and **baths**

**People**

- \_\_\_\_\_

 food

 **baths**

 Animals

 animal friends

# Vocabulary Check 1

## Match the pictures with the words.

1.



2.



3.



• a goggles

• b jar

• c tunnel

## Match the words with the similar meanings.

1. emperor •

• a make full

2. fill •

• b king

3. place •

• c put

## Choose the correct answers.

1. Watch out! Bees can \_\_\_\_\_ you.

- a smell
  - b sting

2. Sun cream can \_\_\_\_\_ your skin from the sun.

- a protect                          b attack

3. Don't \_\_\_\_\_ food to the library.

- a bring                          b eat

 **Complete the dialogue.**

**A:** Yesterday, I saw a homeless dog on the street.

**B:** What did you do?

**A:** I played with the dog. Then I took him to the animal \_\_\_\_\_ . It \_\_\_\_\_ the animals from danger.

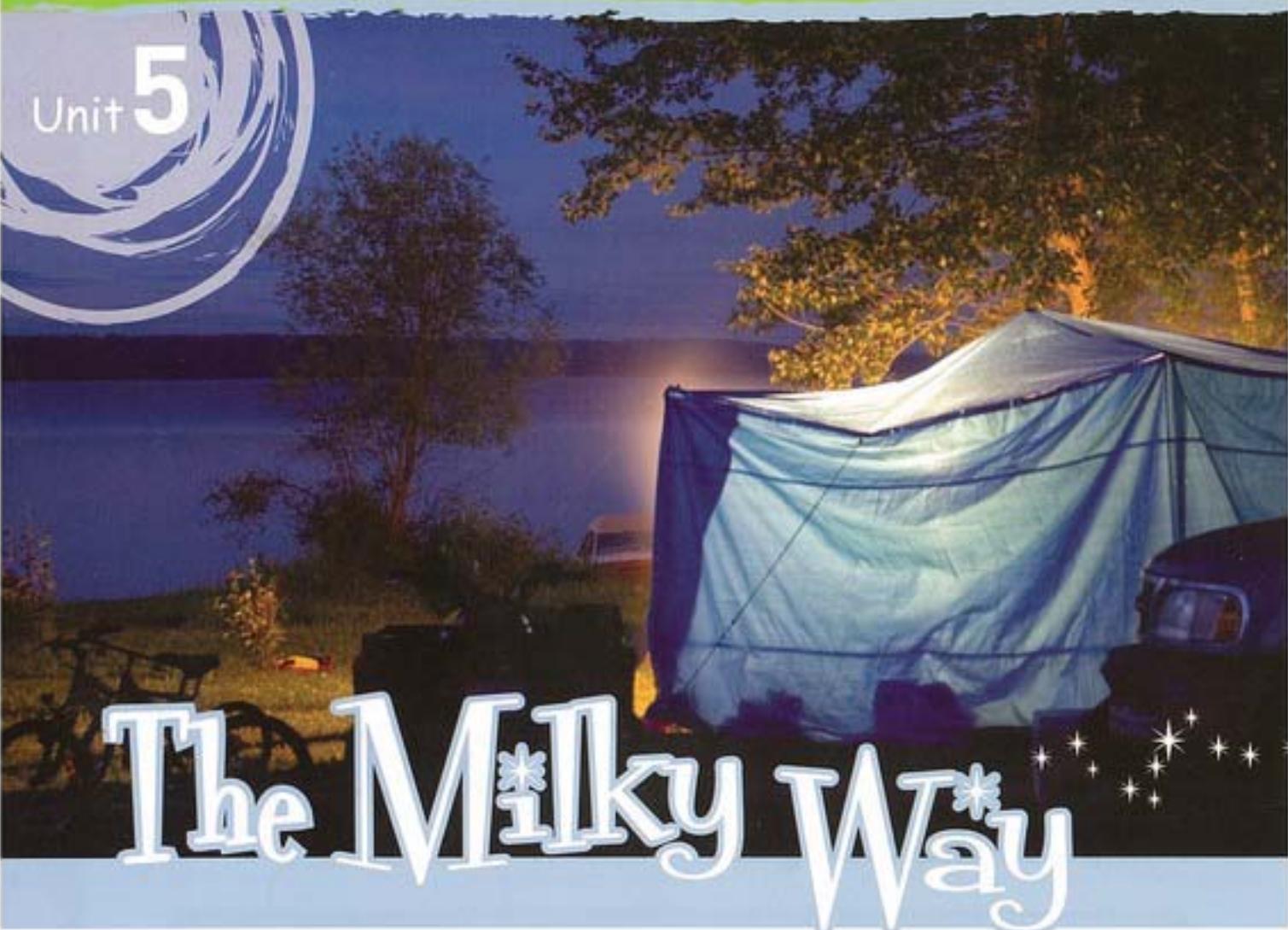
**B:** Do you miss him?

**A:** Yes. But I can always \_\_\_\_\_ him there.

## shelter

visit

protects



# The Milky Way

## Get Ready

### 1. What are in the universe?

stars	black hole	airplane	the sun
galaxy	spaceship	the moon	clouds

### 2. Listen and repeat.

jewel	billion	collection
dust	wheel	watch

Look up at the sky at night. There are many bright stars in the sky. Those stars are part of our galaxy.

A galaxy is a collection of stars, dust, and gas. There are over 200 billion stars in our galaxy. At night, the stars look like white jewels. They look as white as milk. So our galaxy is called the Milky Way.

The Milky Way is round and looks like a big watch. It moves like a wheel. It takes 200 million years to make one circle!

Look up at the sky again. Now, we know we are part of the Milky Way.



Our Galaxy

# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about the Milky Way, \_\_\_\_\_.

- a the biggest star      b our galaxy

2. The Milky Way got its name because it is \_\_\_\_\_.

a



as white as milk

b



a long way

3. The Milky Way moves like \_\_\_\_\_.

a



a watch

b



a wheel

## Check the correct answers.

True False

4. There are over 200 billion stars in the Milky Way.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5. We are in the Milky Way.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

## Build Vocabulary

### Complete the sentences.

collection

billion

jewel

1. A million has six zeros. A \_\_\_\_\_ has nine zeros.
2. I have the full \_\_\_\_\_ of the Harry Potter books.
3. Dad bought a ring with a big \_\_\_\_\_ for Mom.

## Organize Information

### Complete the graphic organizer.

#### Facts about Our Galaxy

What it is	It is a collection of _____, dust, and gas.
How it looks	It looks like a _____.
How it moves	It makes a _____.

 Galaxy

 circle

 watch

 stars



# Leaves and Needles

## Get Ready

### 1. What are the words for trees?

leaf	bone	fruit	needle
flower	trunk	tail	feather
root	tooth	wing	branch

### 2. Listen and repeat.

flat	group	different
need	long and thin	broad and wide

There are many kinds of trees. But they can all be put into two groups.

One group of trees has long, thin leaves. These are called needles. Pine trees have needles. The other group has flat leaves. Flat leaves are wide. Maple trees have flat leaves.

Trees with needles are called evergreens. The needles are strong. Evergreens can keep the needles during winter. The needles stay green all year long.

Trees with flat leaves are called broadleaf trees. Their leaves are not strong. They fall off in autumn.

All trees use leaves to make food. Evergreens and broadleaf trees may look different. But they both need leaves to live.



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.  
 a trees with different leaves     b trees in different seasons
2. A \_\_\_\_\_ can stay green in winter.  
 a  pine tree       b  maple tree
3. Flat leaves are \_\_\_\_\_.  
 a  narrow       b  wide

## Check the correct answers.

True False

4. Trees use leaves to make water.
5. Broadleaves are stronger than needles.

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

## Build Vocabulary



### Complete the sentences.

group

flat

broad

1. Broccoli is in the cabbage \_\_\_\_\_.
2. My dad carried me on his \_\_\_\_\_ shoulders.
3. I cannot ride my bike. It has a \_\_\_\_\_ tire.

## Organize Information



### Complete the graphic organizer.

Broadleaf Trees

VS

Evergreens

- \_\_\_\_\_ leaves
- falling leaves in autumn

- need leaves

- long \_\_\_\_\_
- stays \_\_\_\_\_ all year

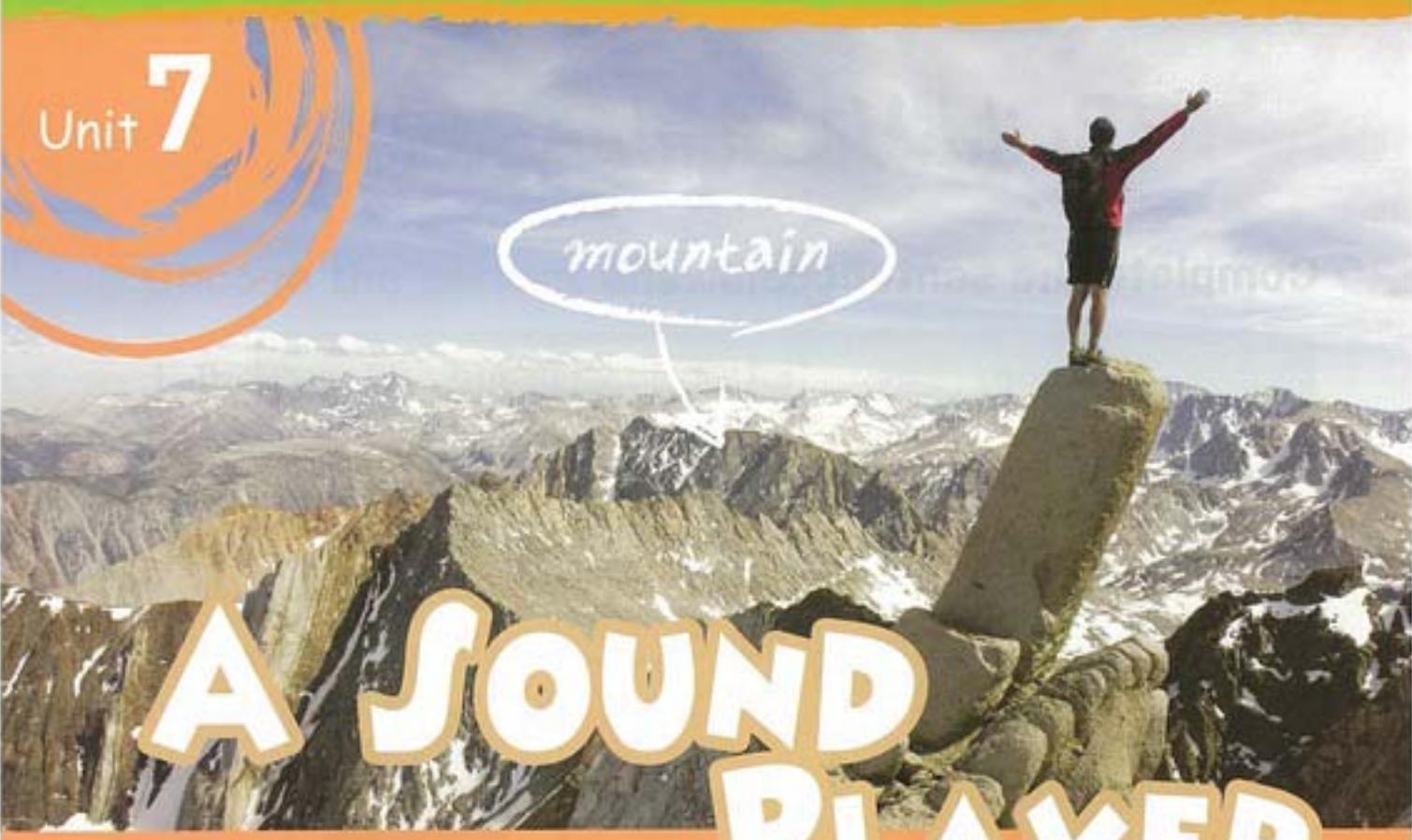
 needles

 leaves

 green

 flat

Unit 7



mountain

# A SOUND PLAYER

## Get Ready

1. Where have you heard an echo?

mountain

bathroom

field

farm

ocean

cave

2. Listen and repeat.

yell

throw

cause

mountain

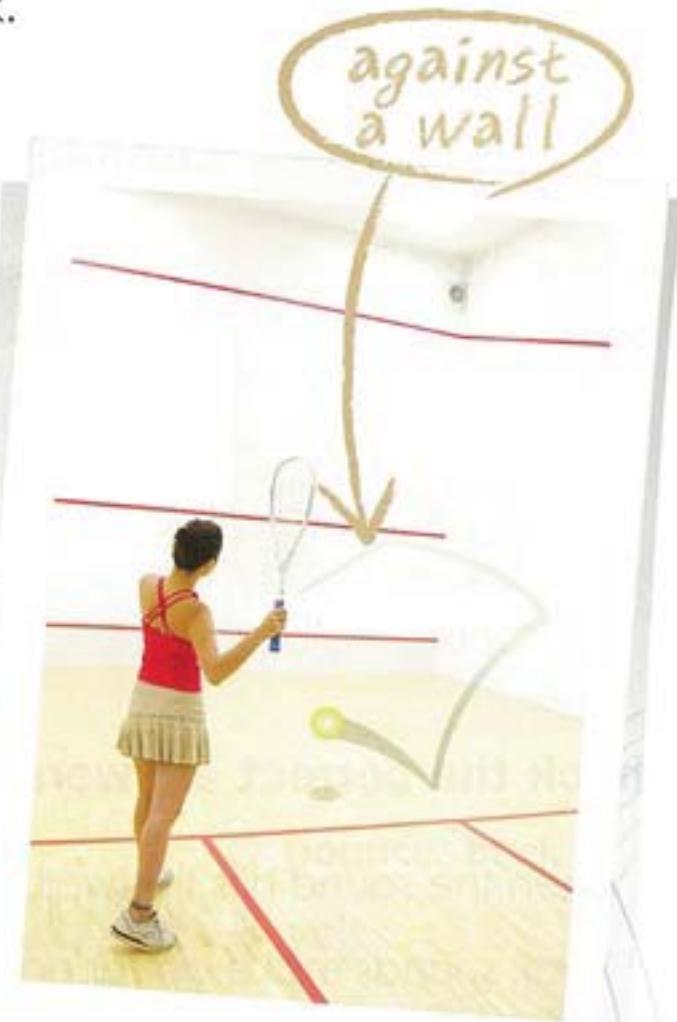
bounce

against a wall

You climb a mountain. You reach the top. You yell in a loud voice: "Yahoo!" A few seconds later, you hear a sound: "Yahoo." It is an echo. So what causes an echo?

Sounds travel like waves in the air. A sound hits something. It may be a wall or a mountain. Then, the sound bounces back. The bouncing sound is an echo. Imagine you throw a ball against a wall. The ball hits the wall. Then, it bounces back to you. So an echo is like a bouncing ball. It is a sound bouncing back.

Shout loudly: "Yahoo!"  
You are a sound player.  
You are throwing  
sounds against a  
mountain!



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- (a) how to find an echo      (b) how an echo is made

2. Sounds move like \_\_\_\_\_.

(a)



waves

(b)



waterfalls

3. An echo is like a \_\_\_\_\_.

(a)



bouncing ball

(b)



bowling ball

## Check the correct answers.

True   False

4. When the sound hits the wall, it gets louder.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5. Weak sounds make better echoes.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

# Build Vocabulary



## Complete the sentences.

yell

cause

bouncing

- I am good at \_\_\_\_\_ a basketball.
- Mother told me not to \_\_\_\_\_ at my sister.
- Be careful! Gas can \_\_\_\_\_ a big fire.

# Organize Information



## Complete the graphic organizer.

### Cause

- People \_\_\_\_\_.
- The sound travels \_\_\_\_\_.
- The sound hits something.
- The sound \_\_\_\_\_.

### Effect

Echo



**hits**  
in the air



**bounces back**  
**yell**

# Unit 8

parade

# A Winter Carnival

Courtesy of Carnaval de Québec

## Get Ready

### 1. What are the words for winter and carnival?

#### winter

cold	hot
rain	snow
swimming	skiing

#### carnival

fun	exciting
boring	quiet
mascot	parade

### 2. Listen and repeat.



carnival

course

mascot

parade

celebrate

dogsled race

Wintertime is lots of fun! There are many things to do. You can make a snowman. You can ski or go sledding.

Quebec City in Canada has Winter Carnival every year. At the carnival, you can meet 'Bonhomme,' the big snowman. He is the carnival mascot. He welcomes everyone with a big smile.

There are many fun things to do at the carnival. You can watch the dogsled races. The dogs pull a sled and run a course. It is fast and exciting. In the evening, you can watch the night parade. You can enjoy music and dancing at the night parade.

Quebec's Winter Carnival is an exciting event. It celebrates fun. And it celebrates winter.



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- a celebrating Winter Carnival
- b the dogsled race in Winter Carnival

2. Bonhomme is a big \_\_\_\_\_.

a



snowman

b



parade

3. You can watch the parade in the \_\_\_\_\_.

a



daytime

b



evening

## Check the correct answers.

4. Quebec's Winter Carnival takes place every other year.

True  False

5. Winter Carnival celebrates fun and night.

True  False

## Build Vocabulary



### Complete the sentences.

carnival

course

celebrated

1. My team \_\_\_\_\_ the victory after the game.
2. The parade was the highlight of the \_\_\_\_\_.
3. The \_\_\_\_\_ of a marathon is 42 kilometers long.

## Organize Information



### Complete the graphic organizer.

#### Fun Things to Do at Quebec's Winter Carnival

The mascot	Parade	<u>Dogsled Race</u>
<ul style="list-style-type: none"> <li>• Bonhomme</li> <li>• _____ people</li> </ul>	<ul style="list-style-type: none"> <li>• night parade</li> <li>• enjoy _____ and dancing</li> </ul>	<ul style="list-style-type: none"> <li>• a sled race _____ by dogs</li> <li>• fast and exciting</li> </ul>

 **welcomes**

 **Dogsled Race**

 **music**

 **pulled**



# Vocabulary Check 2

## Match the pictures with the words.

1.



•

• a wheel

2.



•

• b jewel

3.



•

• c parade

## Match the words with the similar meanings.

1. broad •

• a group

2. collection •

• b straight and even

3. flat •

• c wide

## Choose the correct answers.

1. It is hard to \_\_\_\_\_ a ball in the water.  
**a** climb      **b** bounce
  
2. Many cars \_\_\_\_\_ heavy traffic on the road.  
**a** happen      **b** cause
  
3. I know the answer to the question. You do not \_\_\_\_\_ to tell me.  
**a** want      **b** need

## Complete the dialogue.

- A:** Have you heard about the food fight \_\_\_\_\_ in Spain?
- B:** No. What is it about?
- A:** People \_\_\_\_\_ tomatoes to each other.
- B:** You mean like a snowball fight? That sounds fun!
- A:** There are also parades, fireworks, and music to \_\_\_\_\_ tomato.

throw

celebrate

festival



# Smelly Spray

## Get Ready

1. What smells good and what smells bad?

good

bad

rose  
fish

pizza  
onion

cheese  
strawberry

2. Listen and repeat.



stamp  
spray

scared  
tail

liquid  
raise

Skunks are known for their bad smell. But they do not always smell bad.

Skunks are usually clean and friendly. But if you make them angry or scared, they spray a bad smell! Skunks have two special pockets under their tails. Each pocket is filled with a smelly liquid.

Before spraying, a skunk stamps its feet. Then, it raises its tail. After that, the skunk will shoot out the smelly liquid. The spray is very strong and smelly. If it gets into an animal's eye, the animal cannot see for a while.

Never make a skunk angry or scared. If a skunk raises its tail, start running fast!



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

a skunks' feelings

b skunks' smell

2. Skunks smell when they are \_\_\_\_\_.

a



crazy

b



scared

3. Skunks' pockets are under the \_\_\_\_\_.

a



tail

b



head

## Check the correct answers.

True False

4. A skunk's spray makes other animals not see.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5. A skunk's pocket is filled with smelly gas.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

# Build Vocabulary



## Complete the sentences.

scared

liquid

stamp

1. People clap their hands and \_\_\_\_\_ their feet at the parade.
2. My little brother does not like to take \_\_\_\_\_ medicine.
3. Horror movies make me feel \_\_\_\_\_.

# Organize Information



## Complete the graphic organizer.

### An Angry Skunk



First, it \_\_\_\_\_ its feet.



Then, it \_\_\_\_\_ its tail.



At last, it \_\_\_\_\_ the smelly spray.

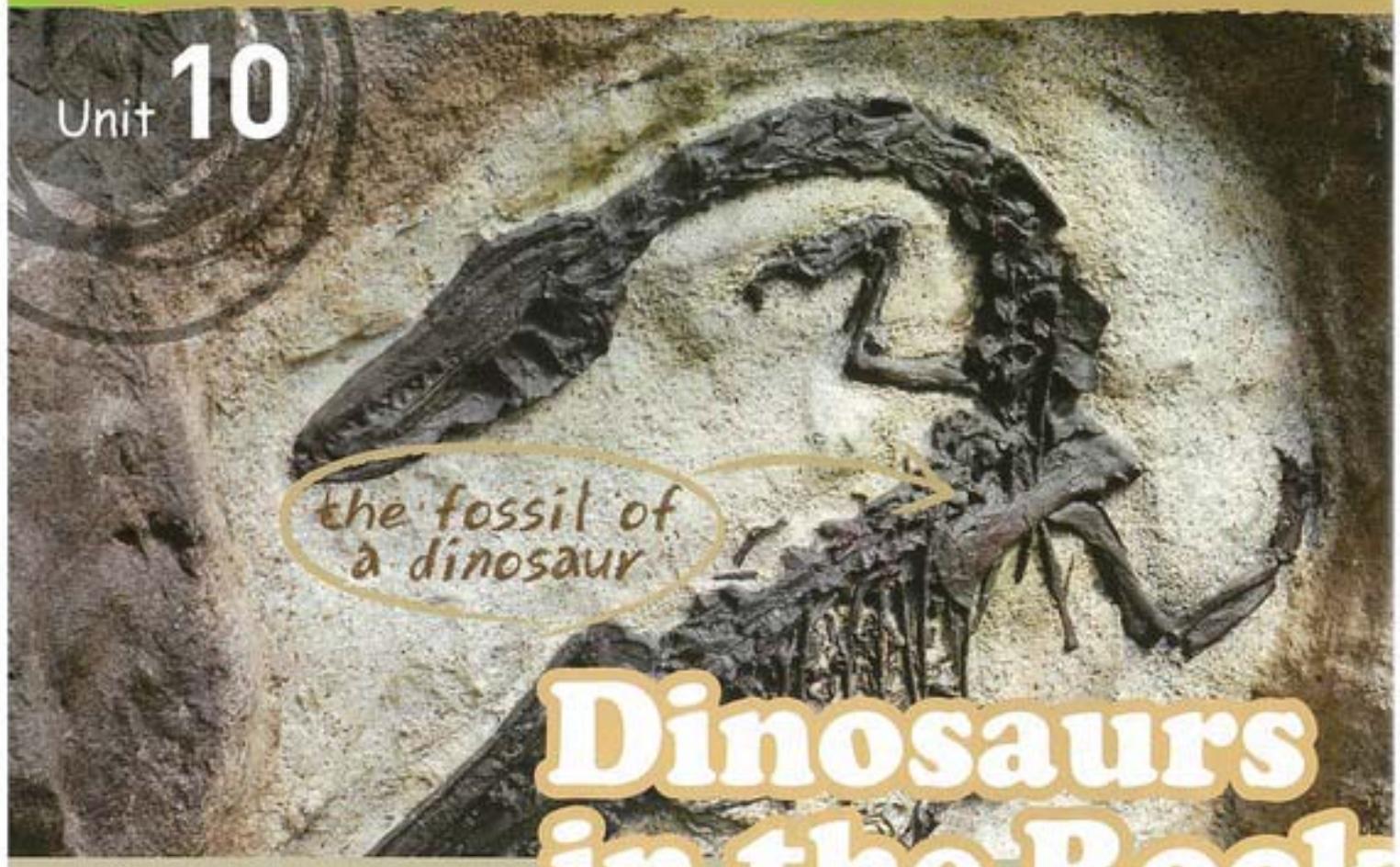
**shoots out**

**stamps**

**Angry**

**raises**

# Unit 10



the fossil of  
a dinosaur

## Dinosaurs in the Rock

### Get Ready

#### 1. What do you know about fossils?

They are a kind of rock.

True   False

They show the color of the animal.

They show the shape of the animal.

It takes a year for them to form.

#### 2. Listen and repeat.



rock

cover

shape

hard

fossil

footprint

Dinosaurs lived many years ago. We cannot meet them. But we can learn about them through fossils. Fossils are special rocks.

First, a dinosaur dies.

Then, mud or sand covers its bones, teeth, or footprints.

Next, the mud or sand becomes hard.

After many years, the bones finally become a rock.

This is a fossil. You can see the bone shapes in the rock!

Fossils help us learn about dinosaurs. We learn when dinosaurs lived. We learn where they lived. We even learn how sharp dinosaurs' teeth were.

Fossils are good teachers!



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- (a) how fossils are made      (b) how dinosaurs lived

2. Fossils are special \_\_\_\_\_ with shapes.

(a)



rocks

(b)



bones

3. Bones, teeth, or \_\_\_\_\_ can become fossils.

(a)



footprints

(b)



hair

## Check the correct answers.

True   False

4. After several years, the bones become fossils.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5. Through fossils, we can learn where dinosaurs lived.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

## Build Vocabulary



### Complete the sentences.

rock

covered

sharp

- Wolves have \_\_\_\_\_ teeth.
- Lava cools and becomes a hard \_\_\_\_\_.
- It snowed a lot last night and \_\_\_\_\_ the whole town.

## Organize Information



### Complete the graphic organizer.

#### How Fossils are Formed

First, the dinosaur \_\_\_\_\_.



Next, mud or sand \_\_\_\_\_ the bones.



Then, the mud and sand gets \_\_\_\_\_.



Finally, the bones become a rock.

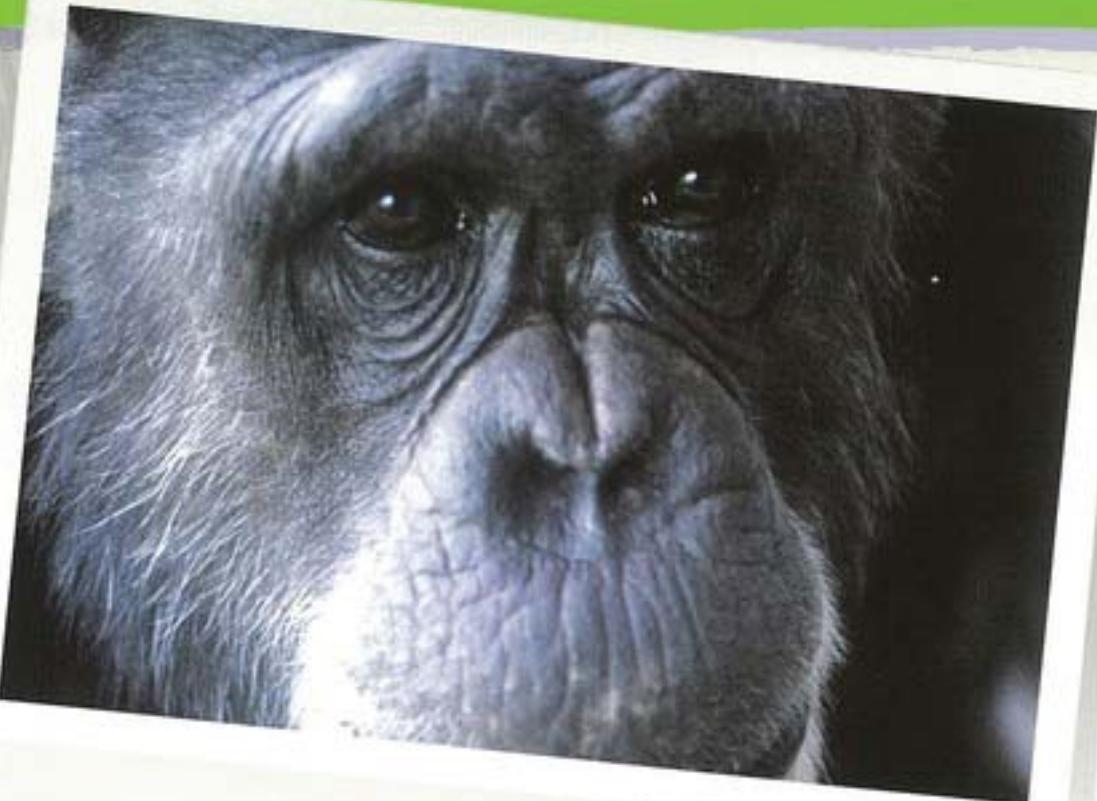
**a rock**

**covers**

**hard**

**dies**





# Washoe's Words

## Get Ready

### 1. What do you know about chimpanzees?

They can walk on two legs.

True   False

They have short tails.

They have long arms.

They can live 50 years.

### 2. Listen and repeat.

mean

remember

sign language

believe

chimpanzee

human parents

A special chimpanzee died in 2007. Her name was Washoe.

Washoe was born in Africa. 10 months later, Washoe was moved to America. Washoe had human parents. They studied chimpanzees. They believed chimpanzees could learn sign language. And they were right. Washoe learned 130 signs using her hands.

Washoe liked people's shoes. Washoe signed the word for "show me." That meant she wanted to see people's shoes. Another time, Washoe saw a swan. She made the sign for "water" and "bird." She knew a swan was a water bird.

Many people still do not believe that chimpanzees can learn. But Washoe showed that she could learn signs. She will be remembered as a special chimpanzee.

washoe's  
parents

washoe, the  
chimpanzee



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.  
 a chimpanzee in danger     b a smart chimpanzee
2. Washoe used her \_\_\_\_\_ to communicate with people.  
 a hands      
 b mouth
3. "Show me" was Washoe's sign for \_\_\_\_\_.  
 a swans      
 b shoes

## Check the correct answers.

4. Washoe was an African chimpanzee.
5. Washoe was special because she could learn.

True   False

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

# Build Vocabulary



## Complete the sentences.

sign language

believed

remember

- Nobody \_\_\_\_\_ that I saw a UFO.
- Deaf people use \_\_\_\_\_ to communicate with others.
- I will always \_\_\_\_\_ my first day in school.

# Organize Information



## Complete the graphic organizer.

### Main Idea

Washoe was a \_\_\_\_\_ chimpanzee.



### Details

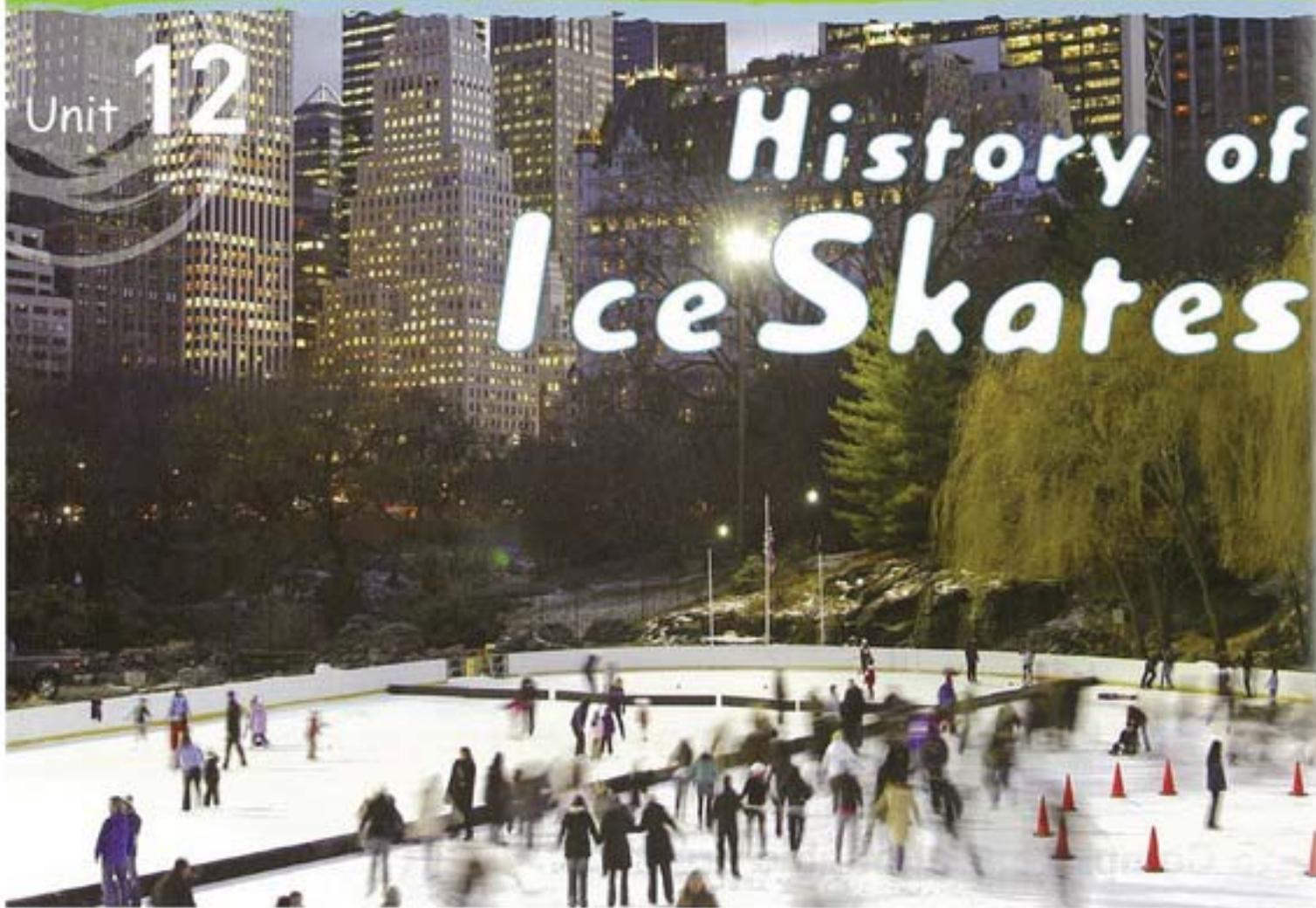
- She had human parents.
- She learned \_\_\_\_\_.
- She showed that chimpanzees could \_\_\_\_\_.

 learn

 special

 **human parents**
 sign language

# History of Ice Skates



## Get Ready

1. What are your favorite winter activities?

skiing      snowboarding      snow fighting  
skating      sledding      making a snowman

2. Listen and repeat.



tie      blade      slippery  
edge      bone      boot

A long time ago, it was hard to walk on lakes in winter because frozen lakes were slippery. People wanted to cross the lakes, so they made ice skates.

In the beginning, they tied animal bones to their feet. They used poles to push themselves forward.

Around 1300, people made ice skates with wood and iron. They tied the wood to the bottoms of their shoes. They put iron pieces on the bottoms of the wood.

In the 1500s, people made blades. The blades were not flat. They had edges. They did not need poles. But people still tied the skates to their shoes.

Finally, in America, a man named Jackson Haines put a blade on a boot in 1865.

Now, we have ice skates!



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- a what ice skates are made of
- b how ice skates have changed

2. At first, people tied \_\_\_\_\_ to their feet.

a



animal bones

b



blades

3. Skates with blades did not need \_\_\_\_\_.

a



wood

b



poles

## Check the correct answers.

True False

4. In the 1500s, ice skate blades were flat.

5. Jackson Haines made a blade skate in 1865.

## Build Vocabulary

### Complete the sentences.

slippery

tie

edge

1. You may cut your finger on the \_\_\_\_\_ of the knife.
2. Watch out! The floor is \_\_\_\_\_.
3. Don't forget to \_\_\_\_\_ your shoe laces before you run the race.

## Organize Information

### Complete the graphic organizer.

#### History of Ice Skates

At first, people made skates with \_\_\_\_\_.



Around 1300, people made skates with \_\_\_\_\_.



In the 1500s, people made blades with edges.



Finally, Jackson Haines put the blade on \_\_\_\_\_.

 **blades with edges**

 **animal bones**

 **wood and iron**

 **a boot**



# Vocabulary Check 3

Match the pictures with the words.

1.



•

• a liquid

2.



•

• b fossil

3.



•

• c blade

Match the words with the similar meanings.

1. rock •

• a firm

2. scared •

• b stone

3. hard •

• c afraid

## Choose the correct answers.

1. It is not safe to stand on the \_\_\_\_\_ of the cliff.

- a edge
  - b elbow

2. We will always \_\_\_\_\_ her beautiful smile and laughter.

- a remember
  - b believe

3. It is cold. \_\_\_\_\_ your legs with the blanket.

- a Spread      b Cover

 **Complete the dialogue.**

**A:** You broke into my room yesterday!

**B:** No, I did not!

**A:** Don't lie! There were clues all over the floor.

**B:** What do you \_\_\_\_\_?

**A:** Your \_\_\_\_\_ were all over the floor.

**B:** How do you know they were mine?

**A:** Your shoes have special \_\_\_\_\_ !

## footprints

**mean**

## shapes

# Unit 13



## The New Soil

### Get Ready

1. What helps plants to grow?

air  
soil

water  
rock

glass  
plastic

sun  
worm

2. Listen and repeat. 

stir  
pile

scraps  
fungi

pass  
bacteria

You can turn food scraps into soil. The soil helps the plants grow. This good soil is called compost.

Let's make some compost outside. First, get a compost bin. The bin needs holes for air. Next, put some food scraps into the bin. Dry leaves are also good. Then, stir the pile. This lets air into the pile. Last, wait. It can take two months or more to make compost.

Many tiny animals help. Bacteria and fungi eat the scraps. Snails and earthworms eat them, too. The tiny animals break down the scraps in their bodies. They pass it as waste. This waste is compost!

You can make compost just like that!



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.  
a how to use food scraps      b how to make compost

2. Compost helps \_\_\_\_\_ grow.

a



plants

b



animals

3. Bacteria, \_\_\_\_\_, snails, and earthworms help to make compost.

a



ants

b



fungi

## Check the correct answers.

4. It takes two days to make compost.  
5. Stir the compost to let air into the pile.

True   False

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

## Build Vocabulary



### Complete the sentences.

scraps

stir

pile

1. It stinks! Mom left the food \_\_\_\_\_ for too long.
2. Put two eggs in the bowl and \_\_\_\_\_.
3. I made a big \_\_\_\_\_ of books on the desk.

## Organize Information



### Complete the graphic organizer.

#### How to Make Compost

First, get a \_\_\_\_\_.



Next, put \_\_\_\_\_ in the bin.



Then, stir the compost.



Last, \_\_\_\_\_ for two months or more.

 **food scraps**

 **wait**

 **compost bin**

 **stir**



# Cars for Clean Air

## Get Ready

### 1. What makes the air dirty?

car

bicycle

airplane

boat

train

roller-skate

motorcycle

walking

### 2. Listen and repeat.



fume

cost

recharge

last

battery

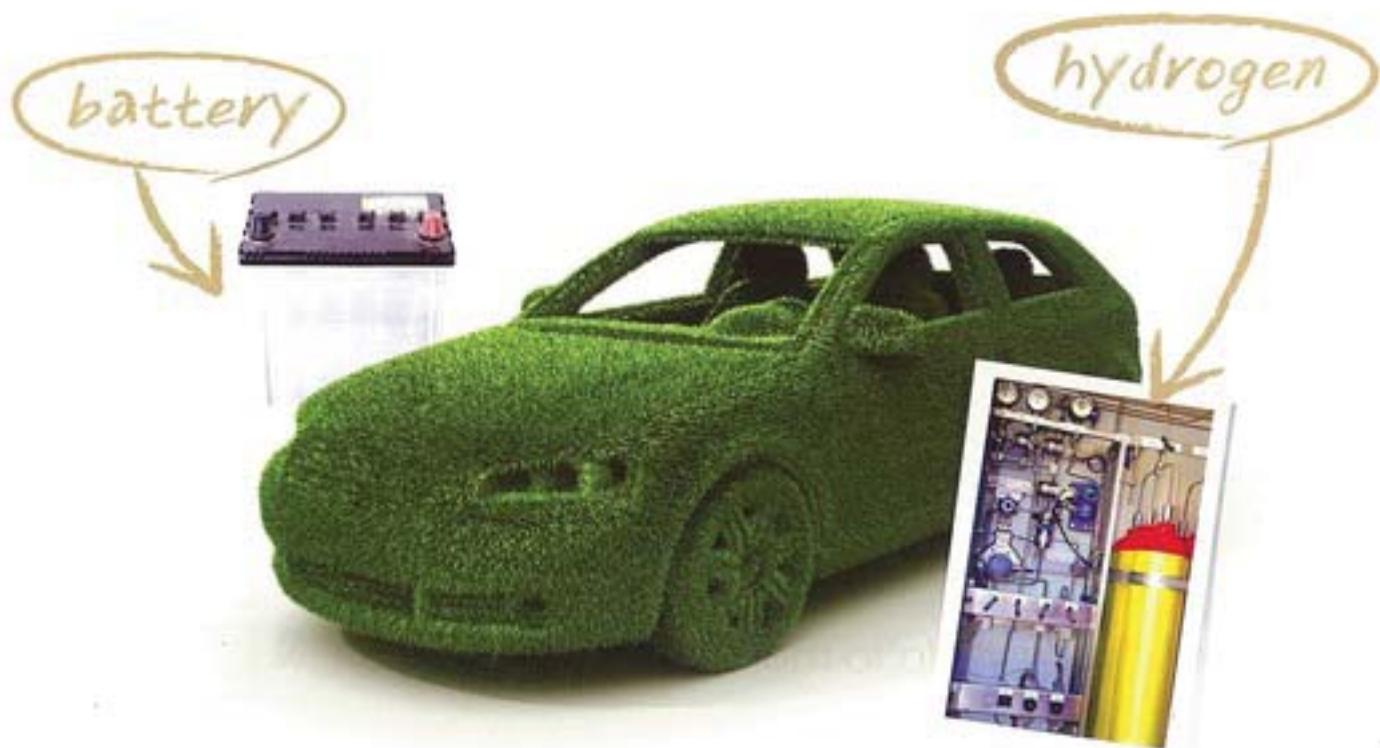
hydrogen

Cars help us move fast, but they make fumes. The fumes make the air dirty. Scientists are trying to make new cars to keep the air clean.

Some cars use very big batteries. The batteries make electricity. Electricity can make cars move. And it does not make any fumes. But there is a problem. The batteries do not last long. So drivers must recharge them often.

Some cars use hydrogen! Hydrogen is a type of gas. Hydrogen cars do not make any fumes. But there is a problem. Hydrogen costs a lot. So drivers must pay a lot of money.

All great inventions take time. But scientists will keep trying. Soon, cars will not make any fumes!



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- a new cars that make no fumes
- b new cars that make clear fumes

2. \_\_\_\_\_ can make electricity for cars.

a



Batteries

b



Hydrogen

3. Hydrogen is a kind of \_\_\_\_\_.

a



gas

b



water

## Check the correct answers.

True False

4. Every car makes fumes.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5. Scientists are trying to make clean cars.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

# Build Vocabulary



## Complete the sentences.

recharge

fumes

cost

1. My phone does not work. I must \_\_\_\_\_ the battery.
2. It will \_\_\_\_\_ a lot of money to repair my TV.
3. The sky is gray because of the \_\_\_\_\_ from the factory.

# Organize Information



## Complete the graphic organizer.

### Main Idea

Scientists make new cars for \_\_\_\_\_.



### Detail 1: Battery Cars

- Good: They make no fumes.
- Bad: Battery does not \_\_\_\_\_.

### Detail 2: Hydrogen Cars

- Good: They make no fumes.
- Bad: Hydrogen \_\_\_\_\_.

clean air

costs a lot

no fumes

last long



# Unit 15



Anne Sullivan,  
the teacher

Theresa Parks Spencer Papers, R. Stanton Avery  
Special Collections Department, New England Historic Genealogical Society

## Out of the Dark

### Get Ready

1. If you cannot see or hear, what do you think you can do?

play	eat	feel	taste
sing	speak	cry	laugh
read	write	learn	teach

2. Listen and repeat.

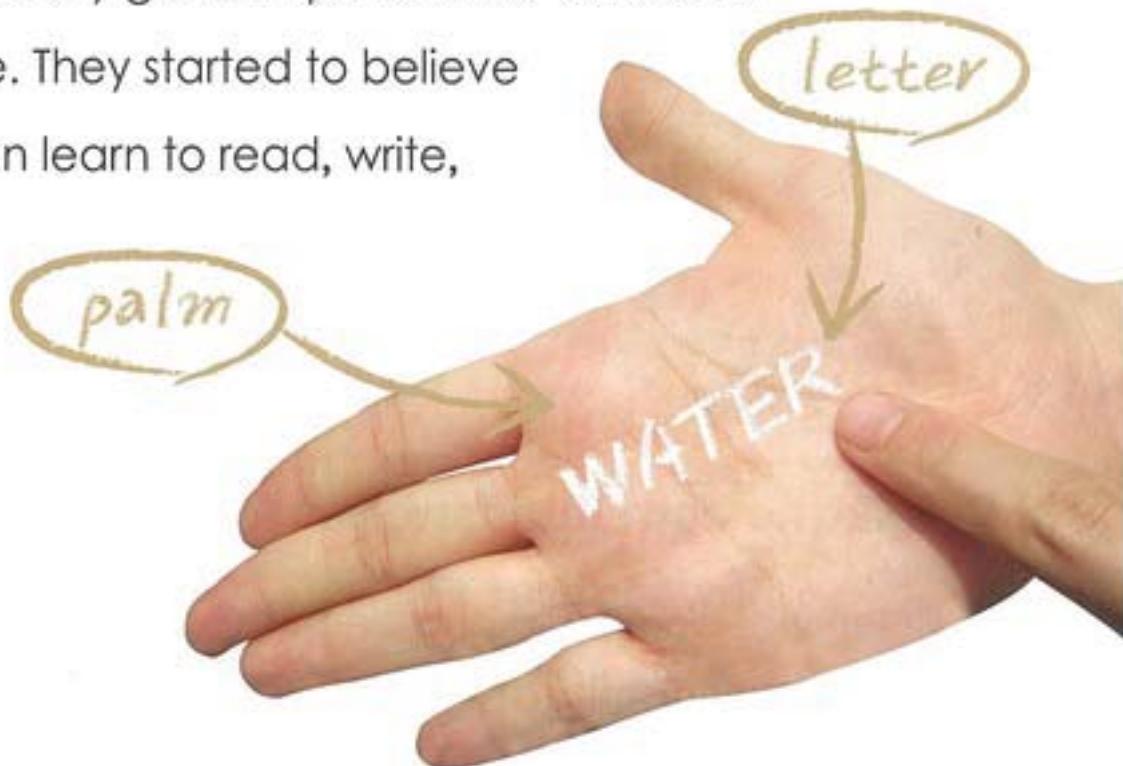
blind	deaf	have to
hope	palm	letter

Helen Keller was born in June 1880 in the United States. Helen became blind and deaf when she was a baby. The world was very dark and quiet for her.

When Helen was seven, she met a teacher, Anne Sullivan. Anne taught Helen how to read. She wrote letters on Helen's palm with her finger. Two years later, Helen could read and write very well.

But Helen still could not speak. Not many blind and deaf people could speak. So Helen had to learn it in a special way. Helen put the fingers on Anne's lips and felt the lips move. This made Helen finally speak.

Helen's story gave hope to other blind and deaf people. They started to believe that they can learn to read, write, and even speak!



# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- a how Helen Keller learned to communicate
- b what Helen Keller learned to help people

2. Anne \_\_\_\_\_ on Helen's palm.

a



drew pictures

b



wrote letters

3. Helen put her fingers on Anne's \_\_\_\_\_ to feel the movement.

a



lips

b



palm

## Check the correct answers.

True False

4. Helen was born blind and deaf.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5. It is hard for blind and deaf people to speak.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

## Build Vocabulary

### Complete the sentences.

blind

deaf

hope

1. My \_\_\_\_\_ is to invent a new computer game.
2. The \_\_\_\_\_ man cannot see the food, but he can smell it.
3. Beethoven became \_\_\_\_\_, but he wrote beautiful music.

## Organize Information

### Complete the graphic organizer.

#### Helen Keller's Life

in 1880

at age 7

at age 9

Helen Keller  
was born.

She met a  
\_\_\_\_\_,  
Anne  
Sullivan.

She learned  
how to \_\_\_\_\_.  
\_\_\_\_\_.

She learned  
how to \_\_\_\_\_.  
\_\_\_\_\_.



1880



teacher



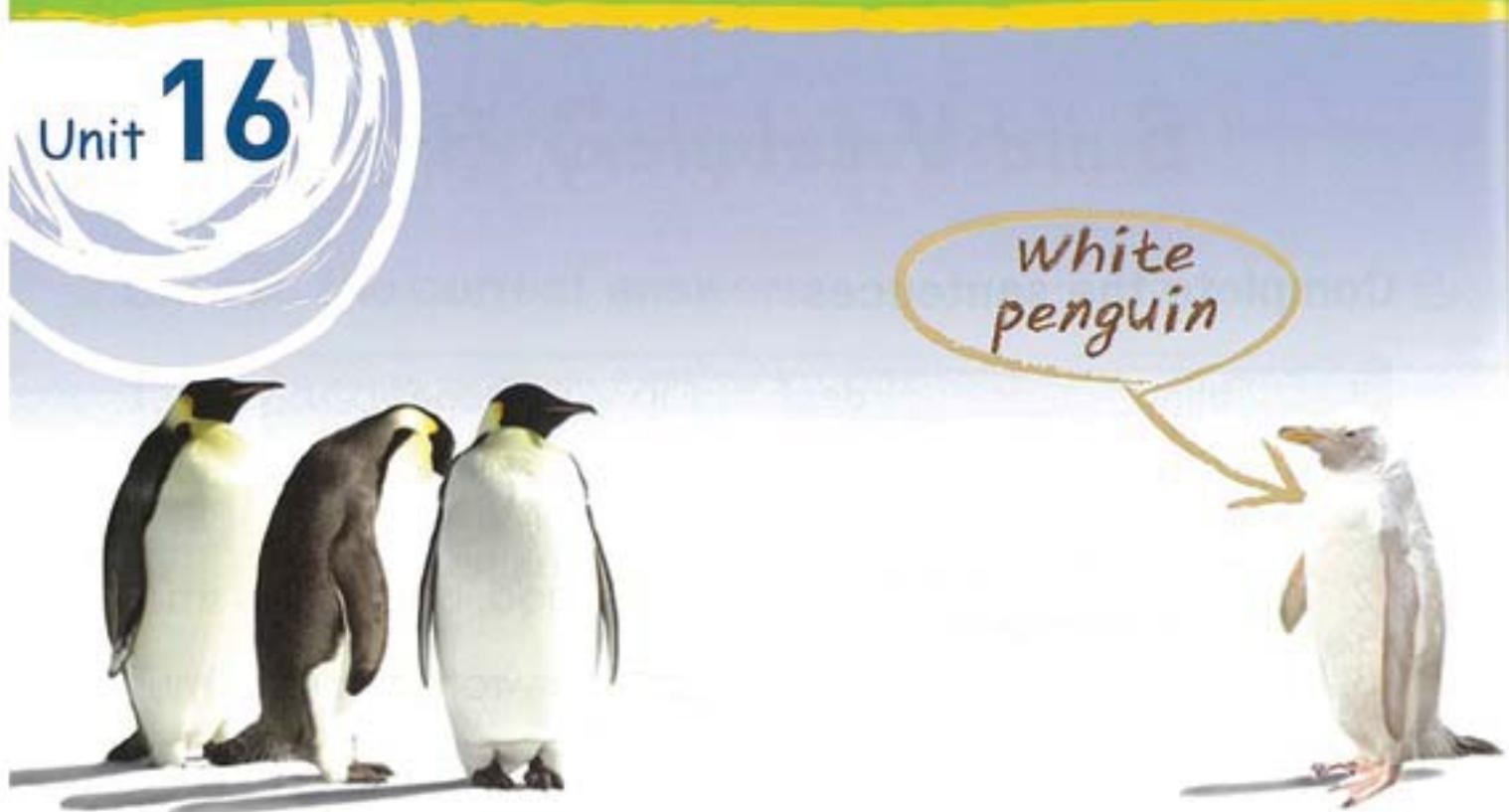
read and write



speak



# Unit 16



## White as Snow

### Get Ready

#### 1. Which are weird?

- |                   |                            |
|-------------------|----------------------------|
| a white gold fish | a beetle with 6 legs       |
| a flying ostrich  | a monkey hanging on a tree |
| a smelly skunk    | a buzzing bee              |

#### 2. Listen and repeat.



rare

answer

grown-up

white penguin

stand out

white lion

All penguins have black heads and backs. But there is a different penguin. This penguin is special.

He is as white as snow. White penguins are very rare. So scientists do not know much about white penguins. They only know that they are born with fewer color cells. This happens to other animals, too. There are white lions, white seals, and white fish.

Scientists want to study white animals more. But most white animals die when they are young. They stand out because of their color. So their enemies can easily hunt them. But this white penguin is a grown-up. So it is even more special.

Scientists can study the grown-up white penguin. He will answer questions about the other white animals. Long live the white penguin!



*white lion*

# Check Comprehension



## Choose the correct answers.

1. The passage is mainly about \_\_\_\_\_.

- (a) white penguins      (b) penguins' enemies

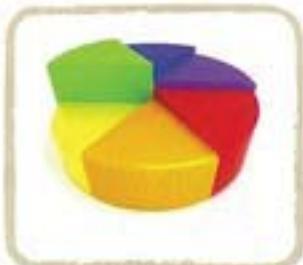
2. The white penguin is born with fewer \_\_\_\_\_ cells.

(a)



blood

(b)



color

3. Most white penguins die when they are \_\_\_\_\_.

(a)



grown up

(b)



young

## Check the correct answers.

True   False

4. White animals stand out because they are young.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

5. The white penguin should be protected.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

## Build Vocabulary

### Complete the sentences.

rare

stands out

grown-ups

- Red wolves are \_\_\_\_\_.
- A girl wearing a hot, pink shirt \_\_\_\_\_.
- Everybody loves fairy tales, even \_\_\_\_\_!

## Organize Information

### Complete the graphic organizer.

#### Opinion

The white penguin is \_\_\_\_\_.



#### Supporting Details

- He is as white as \_\_\_\_\_.
- He is a grown-up.
- He can \_\_\_\_\_ questions about the white animals.

 **answer**
 **snow**
 **special**
 **grown-up**

# Vocabulary Check 4

Match the pictures with the words.

1.



•

• a palm

2.



•

• b scraps

3.



•

• c pile

Match the words with the similar meanings.

1. last

•

• a wish

2. grown-up

•

• b continue

3. hope

•

• c adult

## Choose the correct answers.

1. Put the vegetables in the pot and \_\_\_\_\_ to mix them well.  
**a** stir                                   **b** circle
2. You look so beautiful. You \_\_\_\_\_ in the group.  
**a** stand in                               **b** stand out
3. The jar costs a lot because it is \_\_\_\_\_.  
**a** rare                                      **b** everywhere

## Complete the dialogue.

**A:** I'm upset. That woman doesn't \_\_\_\_\_ my question.

**B:** Oh, you didn't know? She is \_\_\_\_\_.

**A:** Then how can I talk to her?

**B:** You \_\_\_\_\_ use sign language.

**A:** But I don't know sign language.

**B:** It is not that hard. Let me teach you.

have to

deaf

answer

# Glossary

## Unit 1 Why Onions Make You Cry

- break:** to be apart into pieces  
**sting:** to make a sharp hurting feeling  
**refrigerator:** a machine that keeps food cold  
**goggles:** special glasses that protect the eyes

## Unit 2 How Long is the Great Wall of China?

- protect:** to keep from harm or danger  
**enemy:** a person who wants to hurt another person  
**emperor:** a king  
**treasure:** a valuable thing or person

## Unit 3 An Ant Farm

- tunnel:** an underground path  
**fill:** to make full  
**dig up:** to take out dirt from the ground and make a hole  
**place:** to put

## Unit 4 Animal Shelters

- bring:** to carry from one place to another  
**shelter:** a place that keeps you safe  
**homeless:** not having home  
**visit:** to go and see

## Unit 5 The Milky Way

- collection:** a set of things together in one place  
**dust:** very small pieces of soil  
**billion:** one thousand million  
**jewel:** a special stone that shines

## Unit 6 Leaves and Needles

- group:** a set of the same kinds put together  
**flat:** straight and even  
**broad:** large and wide  
**need:** to want or must have



## Unit 7 A Sound Player

**yell:** to shout loudly

**cause:** to make something happen

**bounce:** to come back after hitting against something

**throw:** to send through the air using an arm

## Unit 8 A Winter Carnival

**carnival:** a fun event with games or shows

**mascot:** an animal, person, or thing that brings good luck

**course:** a track or ground where a race takes place

**celebrate:** to make an event special with parties or activities

## Unit 9 Smelly Spray

**scared:** feeling afraid or frightened

**spray:** to send out tiny drops of water

**liquid:** something that flows like water

**stamp:** to hit the ground with the foot hard

## Unit 10 Dinosaurs in the Rock

**rock:** a hard matter; stone

**cover:** to put something on or over

**hard:** not soft; firm

**shape:** the appearance of an object's outline

## Unit 11 Washoe's Words

**believe:** to think something as true

**sign language:** a way to talk to each other using actions

**mean:** to want to express

**remember:** to keep in the memory

# Glossary

## Unit 12 History of Ice Skates

**slippery:** very smooth and difficult to move

**tie:** to pull the sides together with a string

**blade:** the metal part of an ice skate

**edge:** the cutting side of a sharp object

## Unit 13 The New Soil

**scraps:** small pieces of food

**stir:** to mix or shake

**pile:** a group of many things put on top of another

**pass:** to move past

## Unit 14 Cars for Clean Air

**fume:** strong or harmful smoke

**last:** to go on; continue

**recharge:** to store electricity in a machine

**cost:** to have a price

## Unit 15 Out of the Dark

**blind:** not able to see

**deaf:** not able to hear

**have to:** to be forced to; must

**hope:** a wish for something

## Unit 16 White as Snow

**rare:** not often seen

**stand out:** easily to be seen

**grown-up:** an adult

**answer:** to reply